

REMARKS

In the Office Action mailed June 25, 2008 the Office noted that claims 11-18 were pending and rejected claims 11-18. Claims 11, 17 and 18 have been amended, claims 12 and 13 have been canceled, claim 19 and 20 have been added, and, thus, in view of the foregoing claims 11 and 14-20 remain pending for reconsideration which is requested. No new matter has been added. The Office's rejections are traversed below.

REJECTIONS under 35 U.S.C. § 112

Claim 11 stands rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. In particular, the Office asserts that several terms are indefinite. The Applicant has amended the claim to remove the terms.

Withdrawal of the rejection is respectfully requested.

REJECTIONS under 35 U.S.C. § 103

Claims 11-17 stand rejected under 35 U.S.C. § 103(a) as being obvious over Salzman, U.S. Patent No. 5,423,320 in view of Fiddian-Greene, U.S. Patent No. 6,238,339. The Applicants respectfully disagree and traverse the rejection with an argument and amendment.

Salzman discusses catheter that has a tip which is

inserted into a patient to measure gas levels. Within the catheter are two lumens for carrying gases from a cavity 18 with a tip 20 which is a gas permeable membrane.

However, the present invention embodied in the claims is directed to a catheter in which the entire length of the tubes is gas permeable increasing the amount of gas received by the catheter. This is apposed to Salzman which only takes in gas in the gas sample chamber 18 at the tip of the catheter.

On page 3 of the Office Action it is asserted that Slatzman, Fig. 6, discloses "wherein the distal end (22) of the second tube (2) is in communicating connection with the first tube (1)," as in claim 11.

However, the distal end of this first tube is not in communication with the distal end of the second tube. The two tubes in Salzman Fig. 6 do not touch. Instead, in Salzman both distal ends of lumens 54 and 56 open into gas sample chamber 18. Thus, the Applicant acknowledges that the distal ends of lumens 54 and 56 communicate with gas sample chamber 18, but not with each other as recited in the claims.

On page 3 of the Office Action, it is acknowledged that Salzman does not disclose "the first tube (1) and the second tube (2) are made of a material readily permeable for gases and substantially impermeable for body fluids and other substances," as in claim 11, but is asserted that Fiddian-Greene does.

However, the applicant submits that Salzman teaches

away from combination with Fiddian-Greene. Salzman, col. 5, lines 15-23 states

In the illustrated embodiment of FIG. 4, the **membrane 20 is only on one side of the catheter**, but in other embodiments the catheter may include multiple membranes in different circumferential locations. In the latter form, even if the distal tip is pressed against the gut wall, only one membrane would be blocked, while at least **one other membrane would permit gas permeation into region 18**. [Emphasis added]

Thus, the membrane 20 already allows for gas to enter the tip of the catheter 14 of Salzman. Therefore, in Salzman there is no need for gas permeable tubes as the gas is collected in sample chamber 18 through membrane 20 at the tip of the catheter.

Additionally, there is nothing in Salzman that states lumens 54 and 56 are exposed to the environment such that they could take in gases. As show in Salzman Fig. 6 there exists a gas chamber 18. For this chamber 18 to work, it follows that catheter 14 is a solid material, thus lumens 54 and 56, also found within catheter 14 are not exposed to the environment where they could take in gas, but instead are imbedded in the solid material. Thus, one of ordinary skill in the art would not use a gas permeable tube in Salzman, as the tube is not exposed to the environment.

Further, there is no need to look to Fiddian-Greene to teach "a section (3) for fixing the position of the device to the patient," as in claim 11. The present claims recite gas permeable tubes, the physician upon inserting the tubes must ensure then entered completely so that the gas permeable tubes

are not exposed to the environment. Whereas, in Salzman only the tip of the catheter need be inserted in order for the gas to permeate the membrane 20 into gas chamber 18. Thus, as the membrane is at the tip, in Salzman there is no requirement to insert to a particular depth. Thus one of ordinary skill in the art would not have looked to Fiddian-Greene to solve a problem that does not exist in Salzman.

For at least the reasons discussed above, Salzman and Fiddian-Greene, taken separately or in combination, fail to render obvious the features of claim 11 and the claims dependent therefrom.

As regards claims 15 and 16, the Office asserts that in view of the combination of Salzman and Fiddian-Greene it would have been obvious to choose particular diameters and thicknesses.

However, as discussed above Salzman has lumens disposed within catheter 14 and thus, the thickness of the tubes are not an issue. Therefore, it would not have been obvious to choose the thickness as Salzman does not require the tubes to be of a particular thickness.

Claim 18 stands rejected under 35 U.S.C. § 103(a) as being obvious over Salzman in view of Fiddian-Greene in further view of Rantala, U.S. Patent No. 6,432,051. The Applicants respectfully disagree and traverse the rejection with an argument and an amendment.

Claim 18 has been amended to recite "the additional

tubings (4, 5) are connected to each other and form a closed system with the tubes (1, 2), wherein the closed system is filled up with an aqueous solution suitable for detecting carbon-dioxide concentration, said solution containing sodium hydrogen carbonate (NaHCO_3), sodium chloride (NaCl) and phenolic red." Support for the amendment may be found, for example, on page 7, lines 30-34 of the Specification. The Applicant submits that no new matter has been added by the amendment of claim 18. The prior art fails to disclose an aqueous solution suitable for detecting carbon-dioxide concentration, said solution containing sodium hydrogen carbonate (NaHCO_3), sodium chloride (NaCl) and phenolic red.

Claim 18 is also allowable as being dependent from an allowable base claim.

For at least the reasons discussed above, Salzman, Fiddian-Greene and Rantala, taken separately or in combination, fail to render obvious the features of claim 18 and the claims dependent therefrom.

Withdrawal of the rejections is respectfully requested.

NEW CLAIMS

Claims 19 and 20 are new. Support for claims 19 and 20 may be found, for example, in claim 11 as previously presented. The Applicants submit that no new matter has been added by the inclusion of claims 19 and 20.

SUMMARY

It is submitted that the claims satisfy the requirements of 35 U.S.C. §§ 112 and 103. It is also submitted that claims 11 and 14-20 continue to be allowable. It is further submitted that the claims are not taught, disclosed or suggested by the prior art. The claims are therefore in a condition suitable for allowance. An early Notice of Allowance is requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON



James J. Livingston, Jr.
Reg.No. 55,394
209 Madison St, Suite 500
Alexandria, VA 22314
Telephone (703) 521-2297
Telefax (703) 685-0573
(703) 979-4709

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